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REMARKS

Claims 1-28 are pending in the present Application. Reconsideration and allowance of the claims are respectfully requested in view of the following remarks.

Objected Claims

The Examiner has indicated that Claims 12, 13, 16, 19, 20, and 22-28 are objected to as being dependent upon a rejected base claim and would be allowable if written in independent form. Applicants appreciate this indication of allowable subject matter but request clarification with regard to claims 23-26. Claims 23 and 25 are independent claims from which claims 24 and 26 depend respectively. Accordingly Applicants believe they represent allowable claims as filed and without amendment.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 1, 5-10, 14, 15, 17, 18, and 21 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent No. 4,644,086 to Voges et al. (Voges). Applicants respectfully traverse this rejection.

The Examiner has, in large part, based her rejection upon the presumption that monohydroxyaromatic compounds (phenols) would include dihydroxyaromatic compounds (catechols). The Examiner makes much of the fact that Voges, at col. 1, lines 55-59, indicates that the phenol compounds have at least one hydrogen at the ortho position. While this certainly eliminates phenols that have substituents at both positions ortho to the hydroxy group it in no way indicates that a second hydroxy group may be present.

Applicants respectfully assert that phenols, as a class of compounds, do not include dihydroxy aromatic compounds. Phenols, as a class of compounds are generally considered to be monohydroxylated and may be further substituted with alkyl groups as suggested by Voges (Col. 2, lines 16-21). In contrast, dihydroxy aromatic compounds are frequently referred to as catechols and have a significantly different set of characteristics, including, importantly reactivity. While the presence of a hydroxy group on an aromatic ring significantly affects the reactivity of the compound compared to the unsubstituted compound in wide variety of ways,

similarly the presence of two hydroxy groups has an even greater effect on the reactivity. This increase in reactivity, particularly when coupled with the notorious unpredictability of chemistry involving a catalyst makes it extremely difficult to predict the results of a dihydroxy compound plus catalyst based on a monohydroxy compound and a catalyst. Thus Applicants assert that since Voges does not explicitly disclose dihydroxy aromatic compounds and the reactivity of monohydroxy compounds and dihydroxy compounds are significantly different Voges does not provide adequate basis for anticipation.

Furthermore, the Examiner has asserted that Voges teaching with regard to the inclusion of inert additives, such as graphite, reads on the instantly claimed pore former. Applicants are rather mystified by this assertion and fail to understand how the inclusion of graphite could lead to the formation of pores. In paragraph 16 of the specification a pore former is described as a substance capable of aiding the formation of pores in the catalyst. "Under the calcination condition described herein the pore former decomposes or burn off leaving behind pores in the catalyst." Applicants fail to understand how graphite, which has a boiling point of 3930°C, could be employed as a pore former.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987). Applicants respectfully assert that Voges does not teach the alkylation of dihydroxy aromatic compounds or employment of a pore former in a catalyst precursor system. As a result Voges cannot anticipate the rejected claims.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 2-4 and 11 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Voges. Applicants respectfully traverse this rejection.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

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As described above Applicants assert that Voges does not teach all of the claimed elements and thus the rejected claims are non-obvious.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 07-0862.

Respectfully submitted,

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